

Postscript

Challenge of uncertainty: a dialogue

Orio Giarini

The natural sciences and the social sciences are more and more frequently being found to be dealing with varying degrees of uncertainty. This tends to close the gap between them.

A draft declaration for a Centre for Reflection on Uncertainty starts by saying that death is the only future certainty. All the rest is life, uncertainty.

"Did you say Ulrich¹, Ulrich Tuzzi?"

HAVING LEFT my office, it took me a quarter of an hour to walk to the Grangettes Clinic in Chene Bougeries, a suburb of Geneva. Near to the parking area of the clinic, on the Jura side of the building, I found an old two-storey house surrounded by trees. Perhaps they still include some survivors of the four pine trees, already old at the time, or of the two birch trees that Musil had described in the notes recounting the final years of his life. Unless, of course, they were among the trees that had been sacrificed to make room for the parking lot.

I was in the process of looking to see whether the semi-circular pond was still there when I noticed a friend of mine who is a research fellow at CERN (European Nuclear Research Centre). He is a physicist and he was accompanied by another person of around 40 years of age, with bold features, balding head, and black hair combed straight back. Both of them seemed to be searching for something around the old house.

We shook hands and my friend introduced his companion: "This is one of my colleagues from CERN. Ulrich Tuzzi". He explained that they had come to see if it would be possible to rent the ground floor of the house which has a veranda, and set up there the secretariat of a new Centre for Reflection on Uncertainty.

"The thing is", Ulrich Tuzzi explained to me, "a few

years before the outbreak of the First World War which was to destroy the Austro-Hungarian Empire (I am of Viennese origin), my grandfather was thinking of setting up a General Secretariat for Precision and the Soul".

"I seem to remember reading somewhere..."

"...but he didn't succeed. He hoped to be able to reconcile culture and the European scientific tradition which, from Descartes through Newton to the present day, has increasingly widened the breach between the soul and the body, between knowledge resulting from the natural sciences and that – far more difficult to define – engendered by artistic perception, between the certain and the uncertain. He often said that, in his universe, until then all truth appeared to be divided into two half-truths".

"You – working as you do in a highly prestigious basic research centre – are not going to tell me that the discoveries of modern physics are no more than half-truths".

"In some way, that is true. Something that was not clearly apparent in my grandfather's time – subject as it was to the old positivist and determinist traditions – is that science is not like a warehouse in which packages of definitive and universal knowledge are constantly being accumulated. As Popper has said, science progresses as the result of a process of 'falsification'; it studies the laws of Newton until it finds that, in part and under certain conditions, these laws are false. Up until the time that Einstein arrived on the scene and revealed their inadequacies. And after Einstein, Heisenberg; and then, Prigogine. Research is a dynamic process and not the definitive acquisition of details which accumulate with eternal validity; and synthesis, the addition of any single detail, will change the meaning of its component parts".

"But a chair will always be a chair, a tree a tree, an atom an atom".

"Up to a point, and under certain conditions. Heisenberg's principle of uncertainty leads us to recognize that, at the level of the infinitely small, the equivalent of a chair may, at a given point in time, appear to be something totally different."

"But is it not nonetheless true that technology is becoming increasingly efficient and powerful and that I can see the infinitely small more and more clearly?"

"There comes a point when the simple fact of observing the infinitely small changes it, because the energy released by the observer interacts with that of what

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is being observed."

"Dear Mr Tuzzi, in that case, what you are telling me is that there is no longer any difference between the human or social sciences (in which we ourselves are immersed) and the natural sciences which, by definition, are subject to objective and certain observation."

"This definition has limits of its own. The 'exact' sciences and the 'social' sciences are more and more frequently found to be in the same situation: they both deal with varying degrees of uncertainty. But thanks to this uncertainty, we have the possibility of closing the gap which so worried my grandfather. As a result, it is now possible to consider setting up a Centre for Reflection on Uncertainty to achieve something that a General Secretariat of Precision and the Soul could never have achieved at a time when it was considered that these two poles were inevitably and permanently separated. This is the reason the secretariat was never set up and why my grandfather lived his life through as if in an endless novel, split by the contradictions between the nature of man and that of a science of certainty, and in pursuit of an unseasonable synthesis. However, today, his novel can now be brought to its conclusion, to the word 'end' in readiness for a continuing renaissance and research."

"What you are therefore telling me then is that your grandfather's life or rather his 'novel' is coming to an end precisely because it has the possibility of continuing..."

"This is not just a paradox. Musil wrote on this point that, 'men of that ilk certainly occur today, but they are still few in number and this, in itself, is not sufficient to reunite what had been put asunder'. Nowadays, a new culture is developing and spreading throughout the world: a culture in which it is less and less common to encounter isolated elements. A culture in which a New Alliance is being formed, as the Nobel Laureate Prigogine had said: a culture in the process of integration and construction."

"It seems somewhat problematic to me that all this can, in fact, develop on the basis of uncertainty; if you take from under our feet the little certainty that remains in the world, such as the scientific certainties, I would think that you would just increase the chaos and the feeling of emptiness amongst the upcoming generations."

"Just the opposite is the case. All the dogmas and those pseudo-religions, that have become certain political ideologies, have fully exploited the concept of an exact, certain and ineluctable science: they have deduced from it all sorts of foundationless legitimacies. In the Middle Ages, wars and massacres were permitted and organized in the name of God. In our contemporary 'Middle Ages', even worse massacres have been organized in the name of the 'scientific' laws of society. Never before has chaos been organized so effectively."

"But how can one live and give life proclaiming the value of uncertainty?"

"It is not a question of spreading uncertainty. It is a matter of recognizing that life is uncertain. Humanity must decide sooner or later to create a world which is really civilized, made up of people capable of being mature. It is a matter of recognizing reality. It's an act of in-depth cultural awareness which is essential if we are to avoid the gerrymandering of the purveyors of definitive certainties. It is a matter of learning to live better, assuming one's responsibilities, confronting uncertainty, accepting it. It will be the best of psychotherapies..."

"I can see... you are Viennese ..."

"A Viennese who accepts reality and who even demands an urgent study to find out what is false in Freud."

"I must say, my dear Mr Tuzzi, that I am somewhat perplexed, not to say extremely perplexed. I can understand that you have considerable affection for your grandfather. But, could it not be said that his attitude was to a large extent due to a world in crisis, to a world undergoing decomposition? If my reckoning is correct, your grandfather lived in Vienna mainly during the years immediately preceding the fall of the Austro-Hungarian Empire. His wish to set up the General-Secretariat of Precision and the Soul — I hope you will excuse me if I speak frankly — was this not basically a way of fleeing from reality and, in this way, of taking part in the political disaggregation of his country, and of even being to some extent responsible for it?"

"Obviously, the Austro-Hungarian Empire was immersed in a major crisis and unable to face up to the historical developments of the time."

"A period which lasted for several decades and might be seen as covering the whole Industrial Revolution."

"Just so. The logic of Descartes and Newton was also that of industrial specialization, manufacturing productivity, population 'specialization' and, consequently, of nationalism and class specialization; the drama occurred when the dividing line between dialectic and conflict was breached and the breach became irreversible. This is what happens when nationalism makes supra-nationality impossible. The incompatibility between these two poles is, once again, one which exists between precision and the soul; it is a Cartesian way of subdividing the world and life, an approach which is intrinsically unable to stimulate diversities in a positive way. Here in Switzerland, it has been accepted that the Federal State guarantees and protects the sovereignty and the individuality of the cantons. This system substitutes a state of legality for the law of the international jungle. And our modern world is no longer capable of accepting conflicts and irreparable breaches without the survival of humanity as a whole being endangered."

"But, at least an independent State can defend its freedom."

"That depends on its strength. Independence between unequals places the weak at the mercy of the strong. Only the strongest State, in absolute terms, has perhaps an interest in being really completely independent. Yet there are currently in the world over 150 'independent' states. All of them are one part of 'half-truth', with the other part of this 'half-truth' being the strength of the superpowers. It is for this reason that the world currently follows with baited breath the nomination or election of the leaders of the superpowers, without being able, in the name of the independence of all countries, to participate directly."

"Then, for you, the fall of the Habsburg Empire was an historic disaster. Do you not think that this is, in fact, merely pure nostalgia on your part? You wouldn't, by any chance, be setting up your Centre for Uncertainty so as to celebrate the forthcoming anniversary of the birth of Franz-Josef?"

"I have to admit that you are right on one point. On the one hand, it should clearly be stated that there are numerous reasons why the old Habsburg Empire had to disappear: its inability to give rise to a valid plan for modern federalism, its blundering management of the splintering effects caused by the Industrial Revolution, the inadequate renovation of social structures ... However, on the other hand, it is necessary to highlight the positive aspects of the coexistence of different nations and also not forget that the disintegration of this Empire opened the way

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to the rise of Nazism. The main point is to find in the new culture, which is spreading throughout the world, a new possibility of advancing beyond the current situation, of progressing, or recreating an image of the future and opportunities that the ancient culture and the old ideologies (which nowadays are no longer those of the Austro-Hungarian Empire, but those which destroyed it) have increasing difficulty in putting forward."

"Your Centre for Uncertainty certainly has global ambitions. I fear you are looking for a type humanity which just does not exist."

"True enough, there is a challenge here. But if no one takes up this challenge, our planet will perish. It is a challenge for the evolutionary ability of mankind and, in addition, more than ever today, for deploying a minimum of intelligence, common sense and human quality."

"That depends on what you mean by quality. My grandfather used to say that he was a man without qualities, since he did not have the one that his era required: 'quality' meant the ability to limit oneself to a specialization, a

clearly defined activity, without integrating one's specific universe into a general scheme, without uniting the two poles of the two half-truths."

"From this point of view, I too would be inclined to define myself as a man without qualities."

"Then, join our Centre for Reflection on Uncertainty!"

And we began to discuss the amount of the registration fee. Night had fallen and someone had switched on the lights on the veranda of the house in Chemin des Grangettes (No 29 to be precise). Before we parted, Ulrich Tuzzi handed me a document which bore the title, *Centre for Reflection on Uncertainty - Draft Declaration ...*

Note

1. Ulrich is the name of the hero of a Musil novel entitled *The Man Without Qualities*. The house in Chemin des Grangettes was Musil's last abode.

Centre for Reflection on Uncertainty - draft declaration

"It is only by trying to resolve his moral uncertainties that man can, by creating, discover what he is. In the same way, it is only by attempting to resolve their moral uncertainties that an institution or a group can, in creating, discover what they are."

Tomas S Szasz, *Ideology and Madness*

It is not just 'objective facts' - those which exist outside of man - which count. Facts become history when a human culture, a certain attitude, has revealed or even created them. There is only one fact which imposes itself intrinsically, only one single future certainty: death - both of the individual and of our universe. All the rest is life, uncertainty, the thread of history, the birth of new universes.

Europe, today, is full of facts which allow a picture to be seen of the true attitude of its peoples and governments. Dozens of opportunities present themselves at every instant and it is for each individual to define and reflect in the mirror of these facts by selecting, refusing, accepting and, above all, creating them. Basically, freedom is above all a way of shaping our personality by the construction, selection and use of facts: this is why it is so difficult to agree with other people about the facts.

Yet, a civilisation is a certain way of living and of creating facts: it is a specific 'attitude' to living and to the acceptance of uncertainty. It is a constant battle to ensure that the mirage of certainty does not progress to the stage at which it affects what is living, by shattering the mind with the false hope of the definitive, which would stealthily introduce into man the attraction of dogma, ie abdication.

It is this very uncertainty, the source of life and responsibility, which allows us to believe in the possibility of a strategy of progress: thanks to this, no totalitarian concept or regime can resist indefinitely. Thanks to this, we know that conditions are always renewing themselves, that hope can remain eternal, even under the worst circumstances. Yet, the combat is far from easy when one realizes the extent to which in the course of human history, it has proved possible to petrify any affirmation of life, by the certainties of a Holy Inquisition, no matter whether it be red, white or black.

For this reason, when speaking of Europe and its crisis of civilisation, it is important not to confuse its lack of concepts with its uncertainties.

Europe is in a crisis because it is set in outdated and frustrating certitudes. The crisis is, above all, in attitudes by a choice of images from the past or the future which makes it possible to exorcise the present. On the other hand, if the uncertainties of the present are accepted, the future becomes a raw material for action, the probability of active creation, the possibility of life.

The world in which we live has seldom been so complex, so 'reactive' in all its components, so fully evolutive in all fields: there have seldom been so many opportunities - for both Europeans and other peoples - to create, and consequently to live at a planetary scale. The major uncertainties and even the dramas of our era, contain, and offer to Europeans, a vast opportunity for action, self-discovery, creation and self-creation as a part of and together with the rest of the world. If they are suffering from a feeling of specific crisis, this is not because of the extent of the challenge but of the extent of their willingness to face up to it. The feeling of crisis stems from our own attitudes, from the lack of ability or - quite simply - of the desire to exist.

Admittedly, on the surface, Europe understands the facts of the world: there is a surfeit of experts on all questions. An extensive and in-depth report can be obtained on any question, minor or major, in any field. However, only too often, all these reports do is to fill up the archives of alibi. In the same way as a government which proclaims European union but continues to practice nationalism. In the same way as any intellectual who proclaims justice and liberty but loses them by developing bureaucratic attitudes of mind and thought.

For a number of years now, numerous experts have been labouring to propose projects for Europe: nevertheless, the value of an expert's work is not in the fact that the work has been carried out but rather in the action of the person making use of it. A person who, in the face of uncertainty, in the face of life, discovers a new opportunity.

It is time for Europe to be reborn, to recreate itself in the new world, to find itself again in research and projects for the future, or more simply: to really create itself.

A united Europe, capable of guaranteeing the plurality of its peoples and their diversities, will open the way to a united world - an ambitious step towards a more elevated level of civilisation, a fact which needs to be started for the new millenium.